

Decision Memo

for

Glenshire Brockway Fuel Reduction Project

USDA Forest Service
Tahoe National Forest & Truckee Ranger District
Placer and Nevada County, California
October 2019

Project Background

The Forest Service, Truckee Fire, and Cal Fire recognize the threat of wildfire to nearly 1400 structures in Glenshire and the Greater Juniper Hills subdivisions. To reduce the threat, 1,582 acres of fuel reduction work have been identified, including two National Forest System (NFS) parcels, as part of the Glenshire Brockway Fuel Reduction Project (hereafter referred to as the Glenshire Brockway Project).

The Glenshire Brockway Project consists of 18 separate units totaling 1,582 acres and seven different land owners. Partners for the project include: Tahoe Truckee Airport District (TTAD), USFS, Triangle Properties (Teichert), Sierra Pacific Industries (SPI) Truckee Fire Department, and Cal Fire. The two NFS parcels are identified as Unit 4 (76 acres) and Unit 12 (242) acres totaling 318 acres. Within these two units 234 acres are proposed for grapple pile and burn treatment. All 318 acres are planned for underburn treatment.

The project is located in Placer and Nevada County. Actions proposed on NFS lands are in Township 17N, Range 17E; Unit 4 is in the Southeast $\frac{1}{4}$ of Section 8, and Unit 12 is in Section 28. Both units are east of the Town of Truckee and west, southwest of the Glenshire and Juniper Hills subdivisions. The local communities and surrounding area, including Units 4 and 12, are threatened under the current vegetation conditions and is prone to crown or stand replacing fire.

Forest vegetation in the project area is classified as eastside pine stand with mixed white fir overstory and white fir understory. Brush species are primarily sagebrush, bitterbrush, snowbrush and manzanita. The area was logged and burned by a wild fire in the 1860s and regenerated naturally. Logging occurred in the general area during the 1960s and 1970s when the initial road construction for the subdivision and lot clearing began. Basal area ranges between 50 to greater than 200 feet squared per acre. Dead fuel load is between 20 and 50 tons per acre.

Need for Action

Currently the NFS parcels in the project area do not meet Forest Plan standards and guidelines. The project is entirely within a Wildland Urban Intermix (WUI) defense zone.

The area does not meet WUI defense zone desired conditions due dense ladder fuels and heavy fuel loading. Fuel loading within the project area is high due to fire suppression and limited treatment since the logging efforts in the 1960s and 1970s. Each year the fuel load continues to build and trees continue to fill in. Since all fires in the area are aggressively suppressed, the surface and ladder fuels have built up beyond what is normal. Without treatment, if a fire starts in the area under certain weather conditions it becomes more difficult and dangerous to suppress.



Figure 1: an example of Unit 4

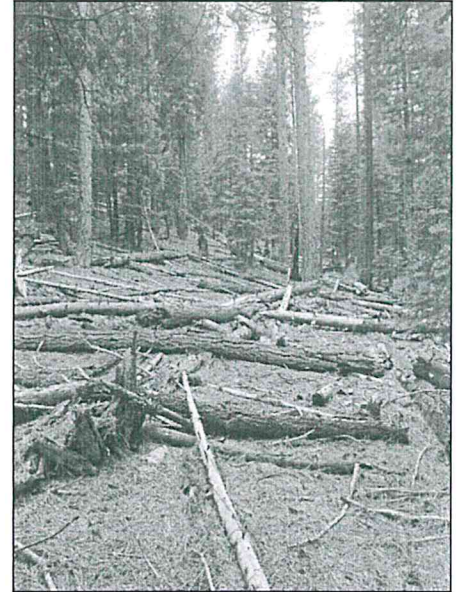


Figure 2: an example of Unit 12

Figures 1 and 2 demonstrate the current dead and down component within Unit 4 and 12 as well as the dense ladder fuels within the project area. Tree spacing is too tight to allow for safe and direct fire suppression. Under high fire danger days, a fire within this stand it is likely to become a crown fire, making fire suppression difficult and more likely to threaten homes within the Glenshire area. Effectively treated lands within the WUI are needed to protect NFS lands from a wildfire and also enhance protection of private property from wildfire. Treatment within these stands will better enable firefighting resources to engage in suppression activities in the event of a wildfire.

Decision and Rational for the Decision

It is my decision to implement the Glenshire Brockway Project as described in the Proposed Action section below.

It is my decision to thin trees less than 11.9-inches DBH while grapple piling competing small trees and shrubs, and grapple piling and machine piling surface fuels in the within the National Forest System Lands (NFS) in the project area for the following reasons:

- I am familiar with the stands targeted for treatment and I believe that cutting and removing some conifers while grapple piling competing brush and other small trees will achieve the project objectives of improved stand condition and overall forest health in an effective and environmentally sound manner.

- The actions on NFS lands will aid in protection from a wildfire and enhance protection of private lands in the event of a wildfire ignition and/or spread on NFS lands. Treatment within these stands will better enable firefighting resources to engage in suppression activities in the event of a wildfire. Furthermore, the project will improve timber stand health by removing ladder/surface fuels and improving tree spacing.

Proposed Action

The proposed action includes a combination of mechanical thinning, grapple piling, pile burning, and prescribed fire, on 318 acres of NFS lands. Material thinned and removed will be less than 11.9-inches DBH in size. Descriptions of the proposed project activities follow below. The treatment and method proposal for each unit is summarized on Table 1.

- Appendix A includes the Proposed Action Map 1 and Illustration 1.
- Appendix B describes the Resource Protection Measures and Standard Management Requirements that will be required for project implementation.

Proposed Actions include:

- Thin live vegetation less than 11.9-inch diameter at breast height (DBH) to a spacing of 20'x 25' on 234 acres
- Machine pile/grapple pile all thinned vegetation and dead/down surface fuels on the same 234 acres
- Underburn treatment on approximately 318 acres (the 234 acres of thinning, machine pile/grapple pile is within the 318 acres of underburn treatment)

Thinning, Grapple Piling and Burning

Trees up to 11.9-inch DBH would be thinned to a spacing of 20'x 25'. Thinned material along with dead/down surface fuels would be picked up by low ground pressure equipment with a grapple head and carry the material suspended from the ground, and place it in a pile for burning. Low ground pressure equipment would be used so that minimal ground and soil disturbance would occur. Piles would range in size from 10' x 10' to 20'x 20'. Piled materials would be burned to remove them from the surface of the forest/ landscape. Burning of the piles usually occurs in the fall/winter months during times of low fire danger. Piled material could include existing dead and downed surface fuels, shrub vegetation, and thinned trees. Piling fuels is a very effective treatment for reducing and removing the amount of surface fuels, breaking up the horizontal continuity of surface fuels across a landscape and increasing the separation between surface and canopy fuels. Burning the piles to remove and reduce the amount of fuels in a stand or across a landscape makes the reintroduction of low-intensity fire by underburning more feasible, effective, and can have less undesirable fire effects, as well as provide for a larger burn window for underburning. There are increased prescribed burning opportunities for the burning of piled material because there is a larger timeframe or burn window available due to environmental parameters and smoke impacts.

Prescribed Fire

Prescribed fire may be used as an initial treatment or follow-up treatment to consume the material on the forest floor that did not get make it into a grapple pile. This material is usually the smaller diameter fuels such as small branches, brush, and pine littler. This is important because this smaller material is what drives fire behavior. In some areas within the project prescribed fire in the form of an underburn will be a standalone treatment due to steep slopes where equipment cannot work. If the fuel loading is too dense for underburning to reach objectives jackpot burning may be the initial treatment. Jackpot burning is a method used when smaller fine fuels (1 and 10 hour fuels) are too wet to burn but the larger fuels (100 and 1000 hour fuels) have not reached moisture of extinction so they are able to burn. Lighters will go out and look for areas where fuels are in "jackpots" which are areas where there is a heavy component of fuels or within tree wells where fuels are drier due to the canopy cover. Normally after a successful jackpot burn an underburn can successfully be initiated.

A combination of 4.11 miles of mechanical and hand line will be built for control lines to keep prescribed fire from moving onto private property.

Skidding material through Unit 4 NFS land

As stated above there are multiple landowners and agencies involved with this project. In order to remove material from Unit 1 (Teichert property) the project must use approximately 1000 feet of NFS lands which is located on the SW corner of Unit 4. The proposal is to skid trees greater than 12-inch DBH if aerial fuel continuity and forest health concerns cannot be satisfied. The proposal for work on the Teichert property is to treat fuels with ground based equipment such as: mechanical harvester, forwarder, chipper, masticator and conventional feller. Thinning and chipping trees between 5-10.9 inches in diameter at breast height will diminish horizontal and vertical continuity of the ladder fuels. Ground based implies both suspended and unsuspended movement of material more complex document. The stand is predominately Ponderosa pine with some Lodge Pole pine and White Fir pockets. Basal area ranges between 50 to > 200 feet squared per acre. Dead fuel load is between 5 and 20 tons per acre. See Illustration 1 in Appendix A.

Table 1: Treatment Methods

<i>Unit #</i>	<i>Approx. Acres</i>	<i>Treatment</i>	<i>Spacing for trees under 11.9 DBH</i>
4	76	Grapple pile, pile burn, underburn	20' x 25'
*12	242	Underburn/jackpot burn	
12a	59	Grapple pile, pile burn, underburn	20' x 25'
12b	82	Grapple pile, pile burn, underburn	20' x 25'
12c	17	Grapple pile, pile burn, underburn	20' x 25'

*Unit 12 encompasses 242 acres where units 12a, 12b and 12c lay within the unit

Resource Protection Measures

Appendix B: Glenshire Brockway Project Resource Protection Measures, Best Management Practices (BMPs), and Standard Management Requirements (SMRs) details measures that will be utilized to protect the environment and assure that any potential impacts are minimized or mitigated.

Public Involvement and Scoping

The USFS, Truckee Fire and Cal Fire have cooperatively recognized the wildfire threat and the need to reduce fuel loading to mitigate fire threat near the Glenshire and the Greater Juniper Hills subdivisions. During the design and analysis of the overall project starting in 2017, Truckee Fire shared project information with community members and nearby landowners. Project information has been posted in Forest Service Schedule of Proposed Actions (SOPA) since April, 2019. The SOPA is mailed to all persons who have expressed an interest in activities that occur on the Tahoe National Forest. On September 18, 2019, the Truckee Ranger District posted the project Proposed Action and maps on the SOPA website (https://data.ecosystem-management.org/nepaweb/nepa_project_exp.php?project=55761), and sent information about the project to 12 adjacent landowners and 69 potentially interested parties, organizations, and agencies. Several oral or informal comments were received expressing support for the project, and one comment letter was received from the Lahontan Water Quality Control Board.

Reasons for Categorically Excluding This Action

An environmental analysis was conducted for this proposed action. As a result of that analysis, a determination has been made that the proposal is in a category of actions that are excluded from further documentation in an Environmental Assessment or an Environmental Impact Statement. This category of exclusion, which requires preparation of a project or case file and decision memo, is established in 36 CFR 220.6(e) (6).

Its applicability to the Glenshire Brockway Project is as follows:

Category 6 - Timber stand and/or wildlife habitat improvement activities that do not include the use of herbicides or do not require more than one mile of low standard road construction.

As stated earlier, the project proposes to improve an eastside pine stand by grapple piling and thinning competing brush and small trees and applying prescribed fire to improve the health, vigor, and resiliency of the remaining stand.

The IDT which developed and analyzed this project included resource specialists from the Tahoe National Forest. That team consisted of a botanist, archaeologist, soil specialist/hydrologist, wildlife biologist, and timber, and fuels specialists. These resource specialists did not identify any issues during project review, and all concerns were addressed by inclusion as part of the project proposal. Their reports are available in the project record located in the Truckee District office.

It was also determined through the environmental analysis that there were no extraordinary circumstances or conditions, as listed in 36 CFR 220.6(b), related to this proposal that might cause the action to have significant effects. Specifically, this determination is based upon the absence, among others, of adverse effects on the following:

1. Federally listed threatened or endangered species or designated critical habitat, species proposed for federal listing or proposed critical habitat, or Forest Service sensitive species.

The following Region 5 Tahoe NF Sensitive Terrestrial or Aquatic Species may occur or have suitable habitat within the project analysis area and were analyzed in detail by the Glenshire Brockway BE Terrestrial and Aquatic MIS MBTA Final: northern goshawk, *Accipiter gentilis*; bald eagle *Haliaeetus leucocephalus*; willow flycatcher, *Empidonax trailii*; Pacific marten, *Martes caurina*. The Report determined that for each of these species, the Proposed Action will have no effect because of lack of sufficient available suitable habitat types. Resource Protection Measures, including but not limited to the possible imposition of a limited operating period (LOP), or the creation of a protected Activity Center (PAC) should presence be determined, will adequately assure no adverse impacts.

The Botanical Review of Glenshire Brockway Project found that the proposed action will not affect any federally threatened, endangered, proposed, candidate or any Forest Service Sensitive botanical species. The determination is based on a) the lack of TES botanical species known or expected to occur within the project area, b) no treatment will be implemented in the meadows or meadow margins, c) equipment will not operate, traverse, or be staged in the meadows or meadow margins, and d) crews will avoid meadows and an 82 foot margin buffer surrounding meadows to protect habitat for the Sierra Nevada yellow-legged frog (*Rana sierrae*). The Review found that there are no extraordinary circumstances related to the location, intensity and amount of work described.

2. Flood plains, wetlands, or municipal watersheds.

The Glenshire Brockway Project was designed to maintain existing watershed conditions, while meeting the objectives of the proposed action. There would be no direct negative impacts to stream channels within the project area. The distance of the proposed actions from hydrologic features further minimize the potential for indirect effects. The amount of land effected by this project in relation to the Martis Creek Watershed (HU_12) is not significant enough to create a cumulative effect. With proper implementation of the project design, BMP's and mitigation measures the proposed action is not expected to significantly change the existing sediment regime, timing or volume and character of runoff, sediment input or transport.

Project design features, including BMPs and other management requirements described in the Resource Protection Measures (Appendix B) along with BMP monitoring practices, would reduce the potential for impacts to soil productivity

and the potential for sediment increases above background levels from the proposed vegetation treatment. The proposed project has incorporated management requirements and monitoring to meet the water quality objectives for beneficial use as established by the Lahontan Regional Water Quality Control Board, and the Federal Clean Water Act.

3. Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas.

This project is not within a wilderness or wilderness study area. There are no National Recreation Areas on the Tahoe National Forest.

4. Inventoried roadless areas.

This project is not within any inventoried roadless area.

5. Research natural areas.

This project is not within a Research Natural Area.

6. American Indians and Alaska Native religious or cultural sites & 7. Archaeological sites, or historic properties or areas.

Based on recent consultation with the Washoe Tribe of Nevada and California, there are no known uses of this area for religious or other cultural purposes. The cultural resource inventory report for this undertaking meets the stipulations of *The First Amendment to the Programmatic Agreement Among the U.S.D.A. Forest Service, Pacific Southwest Region (Region 5), California, State Historic Preservation Officer, Nevada State Historic Preservation Officer, and the Advisory Council on Historic Preservation regarding the Process for Compliance With Section 106 of the National Historic Preservation Act for Management of Historic Properties by the National Forests of the Pacific Southwest Region* (Regional PA 2018). The TNF's file designation for this report is R2019051700014. Three recorded historic properties are located in the Area of Potential Effect (APE): FS Sites 05175700078, 05175700227, and 05175700945. All three sites are located in the southern parcel. Based on the proposed action, fuel reduction activities will avoid all three of these historic properties.

Findings Required by Other Laws and Regulations

National Forest Management Act of 1976

All management practices and activities of the proposed action are consistent with management direction, including standards and guidelines, in the Tahoe National Forest Land and Resource Management Plan (June 14, 1990), as amended by the Sierra Nevada Forest Plan Amendment Record of Decision (January 2004), which were developed in accordance with the National Forest Management Act of 1976, 16 USC 1604(i) and 36 CFR 219.10(e).

Management Indicator Species (MIS)

The Glenshire Brockway Project BE Terrestrial and Aquatic MIS MBTA Final considered affects to habitat of the management indicator species. This Project may result in some limited direct and indirect effects to early seral CWHR habitat types EPN and WFR associated to MIS Mountain Quail because proposed prescriptions are designed to impact the density of tree class sizes under 11.9 inches DBH. The Report found that because of its scope, duration, and scale, the Proposed Action would not significantly impact the availability of suitable Mountain Quail habitat in the broader area, nor will it result in a trend towards federal listing or affect long term viability for this species.

Migratory Bird Treaty Act (MBTA)

The Glenshire Brockway BE Terrestrial and Aquatic MIS MBTA Final considered affects to migratory landbirds consistent with MBTA. Effects are expected to include disturbance such as flushing birds near operating equipment during project implementation. These short term effects are not expected to cause longer-term adverse effects to migratory birds.

Clean Water Act (1972)

Water quality will not be adversely affected with implementation of resource protection and mitigation measures and Best Management Practices (BMPs) incorporated into the project design.

Clean Air Act (1977)

The Project will conform to the Clean Air Act and the State Implementation Plan (SIP). All the predicted emissions are less than the conformity thresholds. Prescribed fire smoke emissions, and similar activities like pile burning, are included in an approved Smoke Management Program (SMP) and are therefore presumed to conform to the SIP.

Soil Resources

The Tahoe National Forest LRMP (USDA, 1990) provides direction for maintaining long-term soil productivity through standards and guidelines for three soil characteristics: soil porosity, soil cover and soil organic matter (LRMP, pages V-36 through V-38). When the standards and guidelines for these three soil characteristics (described below) are met on at least 85 percent of an activity area, the soil is considered to be in an acceptable condition, without significant impairment to soil productivity. The risk of loss of soil porosity through soil compaction is determined by soil texture and rock content. For the soils in the project area this risk ranges from low to moderate. By limiting operations to when the soil is dry and with the use of low ground pressure equipment the likelihood of extensive detrimental soil compaction is unlikely.

Effective soil cover will be reduced through grapple piling and burning as well as underburning. Each one of these treatments alone will not reduce soil cover below minimum standards with the implementation of the RMPs. With the spacing out of each treatment over a period of years, soil cover will have time to recover and effective soil cover standards will be maintained. Soil organic matter in the form of duff would have the potential to be reduced over the project area where grapple piling and burning is expected to occur. Areas of heavy equipment use can affect duff and usually occur on

turning zones. This disturbance is typically limited to 15 % of the activity area. Areas with duff levels reduced to mineral soil can occur in burn piles as well. Increases of soil cover from needle cast available within 3-5 years should be adequate to maintain surface soil organic matter and the extent of the impact is expected to meet S&G#55 and productivity would be maintained.

Non-native Invasive Weeds

The Botanical Review of Proposed Glenshire Brockway Project found that the proposed action will have a low-moderate risk of introducing or spreading invasive species in the proposed project area. Cheatgrass (*Bromus tectorum*) was detected in the project area; however, it occurs infrequently in disturbed areas in Unit 4 and infrequently in meadow margins in Unit 12. There is a low-moderate risk is based on the following: a) presence of *B. tectorum* was minimal in the proposed project area at the time of survey; and b) ground disturbance is expected to be minimal due to the small scale and scope of proposed project. Invasive plant measures will be incorporated into project design to reduce the risk of invasive plant introduction (Appendix B).

Appendices and Documents incorporated by Reference and Available upon Request

Appendices

Appendix A: Project Maps and Illustrations

Appendix B: Glenshire Brockway Fuel Reduction Project Resource Protection Measures and Standard Management Requirements

Documents incorporated by Reference and Available upon Request

1. Botanical Review of Proposed Glenshire-Brockway Fuels Reduction
2. Glenshire Brockway BE Terrestrial and Aquatic MIS MBTA Final
3. Glenshire Brockway Fuel Reduction Project Soil and Water Report

Administrative Review, Appeal Opportunity, and Implementation Date

This assessment of the proposal falls within a category of actions listed in the Forest Service NEPA Handbook (FSH) that are excluded from documentation in an Environmental Assessment (EA) or Environmental Impact Statement (EIS) and there are no extraordinary circumstances that would preclude use of the category (FSH 1909.15, Chapter 31). This category of exclusion, which requires preparation of a project or case file and decision memo, is established in 36 CFR 220.6(e) (20).

Implementation: This decision is not subject to administrative appeal, review or stay, and may be implemented immediately upon approval by the District Ranger.

For more information, contact:

Linda Ferguson, District Fuels Officer
Truckee Ranger District
9646 Donner Pass Road
Truckee, CA 96161
(530) 587-3558
linda.ferguson@usda.gov

Approved by:


JONATHAN COOK-FISHER
Truckee District Ranger

Date

Oct. 18, 2019

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